

CLAIMS

1. Process for making a plastic moulded article with a metallized surface, comprising the steps of
 - 5 (a) introducing a metallized film in a mould; and
 - (b) filling of the mould with a plastic composition by means of injection moulding;characterized in that the metallized film comprises at least one layer consisting essentially of a thermoplastic elastomer containing polyether segments.
- 10 2. Process according to Claim 1, wherein the thermoplastic elastomer has a hardness between 30 and 75 Shore D.
3. Process according to either of Claims 1-2, wherein the thermoplastic elastomer is a copolyether ester.
4. Process according to Claim 3, wherein the copolyether ester contains hard segments that are essentially based on polybutylene terephthalate.
- 15 5. Process according to any one of Claims 1-4, wherein the thermoplastic elastomer contains soft segments derived from poly(tetra methylene oxide)glycol or ethylene oxide-terminated poly(propylene oxide)glycol.
6. Process according to any one of Claims 1-5, wherein the film is metallized by means of vacuum metallizing.
- 20 7. Process according to any one of Claims 1-6, wherein the film is transparent or translucent.
8. Process according to any one of Claims 1-7, wherein the film consists of a single layer consisting essentially of a thermoplastic elastomer containing polyether segments.
- 25 9. Process according to any one of Claims 1-7, wherein the film comprises at least two layers, of which at least an outer layer contains a thermoplastic elastomer that contains polyether segments and which has been metallized.
10. Process according to Claim 9, wherein the at least two layers each consisting essentially of a thermoplastic elastomer containing polyether segments, but of different hardness.
- 30 11. Process according to any one of Claims 1-10, wherein the film has a thickness of 0.05-0.75 mm.
12. Process according to any one of Claims 1-11, wherein a plastic composition is used that is based on a polymer that is compatible or miscible with the

- thermoplastic elastomer containing polyether segments.
13. Process according to Claim 12, wherein the plastic composition is based on a thermoplastic polyester and/or a polycarbonate, and the thermoplastic elastomer is a copolyether ester.
- 5 14. Process according to Claim 13, wherein the plastic composition is a thermoplastic polyester or a polycarbonate composition.
15. Process according to any one of Claims 1-14, wherein the film is laser-markable.
16. Process according to any one of Claims 1-14, wherein the plastic composition
10 is laser-markable.
17. Process according to any one of Claims 1-16, wherein the metallized film is introduced in the mould such that its non-metallized surface is facing the plastic composition.
18. Plastic moulded article with a metallized surface obtainable with the process
15 according to any one of the preceding claims.
19. Plastic moulded article with a metallized surface according to Claim 18, which surface also has soft-touch and/or non-slip properties.
20. Laser-markable plastic moulded article with an at least partially metallized surface obtainable by the process according to Claim 15 or 16
- 20 21. Plastic moulded article with an at least partially metallized surface obtainable by the process according to Claim 15 or 16 and provided with laser markings.
22. End-use product comprising a plastic moulded article according to any one of Claims 18-21.